Petroleum Infrastructure Environmental Performance Report

Scoping Workshop

December 17, 2004

Bakersfield Californian / John Harte

Workshop Agenda

9:00–9:10 Opening Remarks (Commissioners John L. Geesman and James D. Boyd)

9:10–9:45 Staff Presentation - Overview of Staff Scoping Document - Richard K. Buell

9:45– * Comments on Proposed Scope and Data Needs

Interested persons may participate in the workshop via conference call. Call in Number **800-857-2747,** Pass Code **Rick Call**.

* **Comments will be taken until all interested parties have had and opportunity to speak. A lunch break will be taken as appropriate.**

Why Is the Energy Commission Studying the Environmental Performance of the Petroleum Infrastructure

- Public Resources Code (PRC) sections 25300, et seq., requires the Integrated Energy Policy Report to contain an overview of public health and safety and the environmental trends of transportation infrastructure.

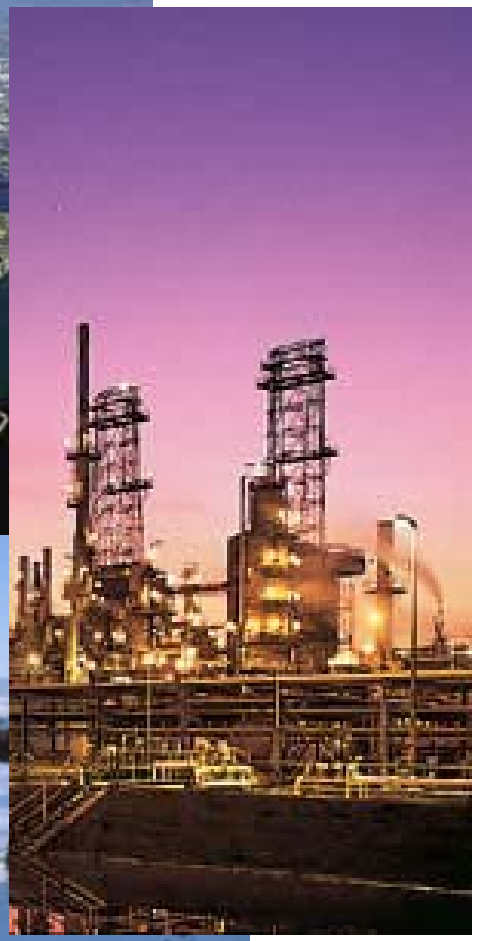
Petroleum Infrastructure Environmental Performance Report Objectives

The basic objectives of this project to:

- Describe the changes that have occurred in the petroleum industry since 1985.
- Identify environmental and public health and safety trends that occurred due to the changes in the industry.
- Describe anticipated changes in the petroleum industry to meet energy/environmental policies.
- Identify the likely environmental and public health and safety consequences of these changes.
- Identify areas for future study and energy/environmental policy development.

Petroleum Infrastructure

- The report will address the environmental footprint of:
  - Marine Terminals
  - Refineries
  - Storage Terminals
  - Pipelines

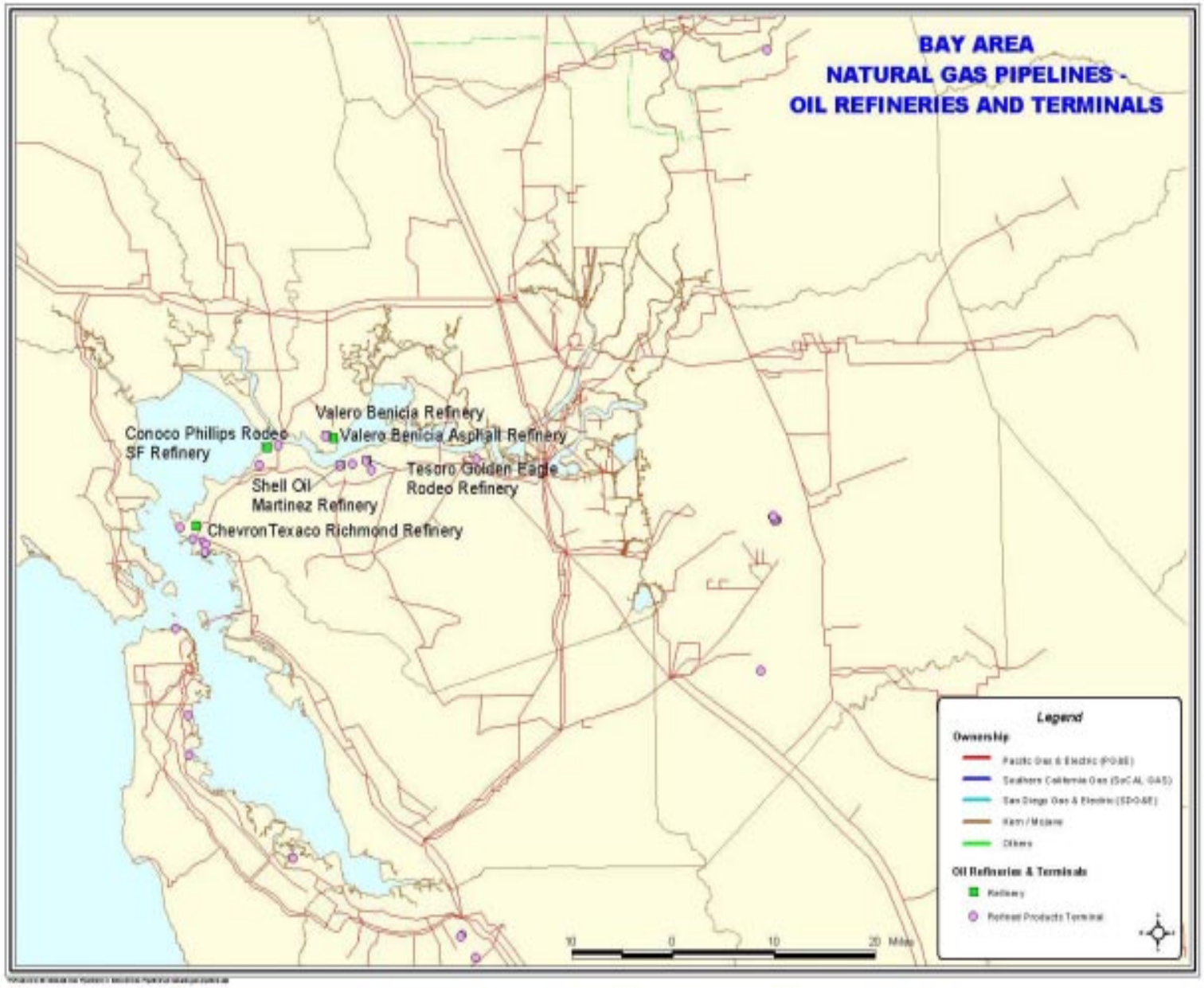


Petroleum Infrastructure

- This year's report will not address:
  - Oil Field Development
  - Retail Distribution
  - End Use Impacts and Policies

Petroleum Infrastructure Facilities are located throughout the state.

December 14, 2004


BAY AREA
NATURAL GAS PIPELINES -
OIL REFINERIES AND TERMINALS
Valero Benicia Refinery
Valero Benicia Asphalt Refinery
Conoco Phillips Rodeo
SF Refinery
Tesoro Golden Eagle
Rodeo Refinery
Shell Oil
Martinez Refinery
ChevronTexaco Richmond Refinery
Legend
Ownership
Oil Refineries & Terminals
Refinery
Refined Products Terminal
10
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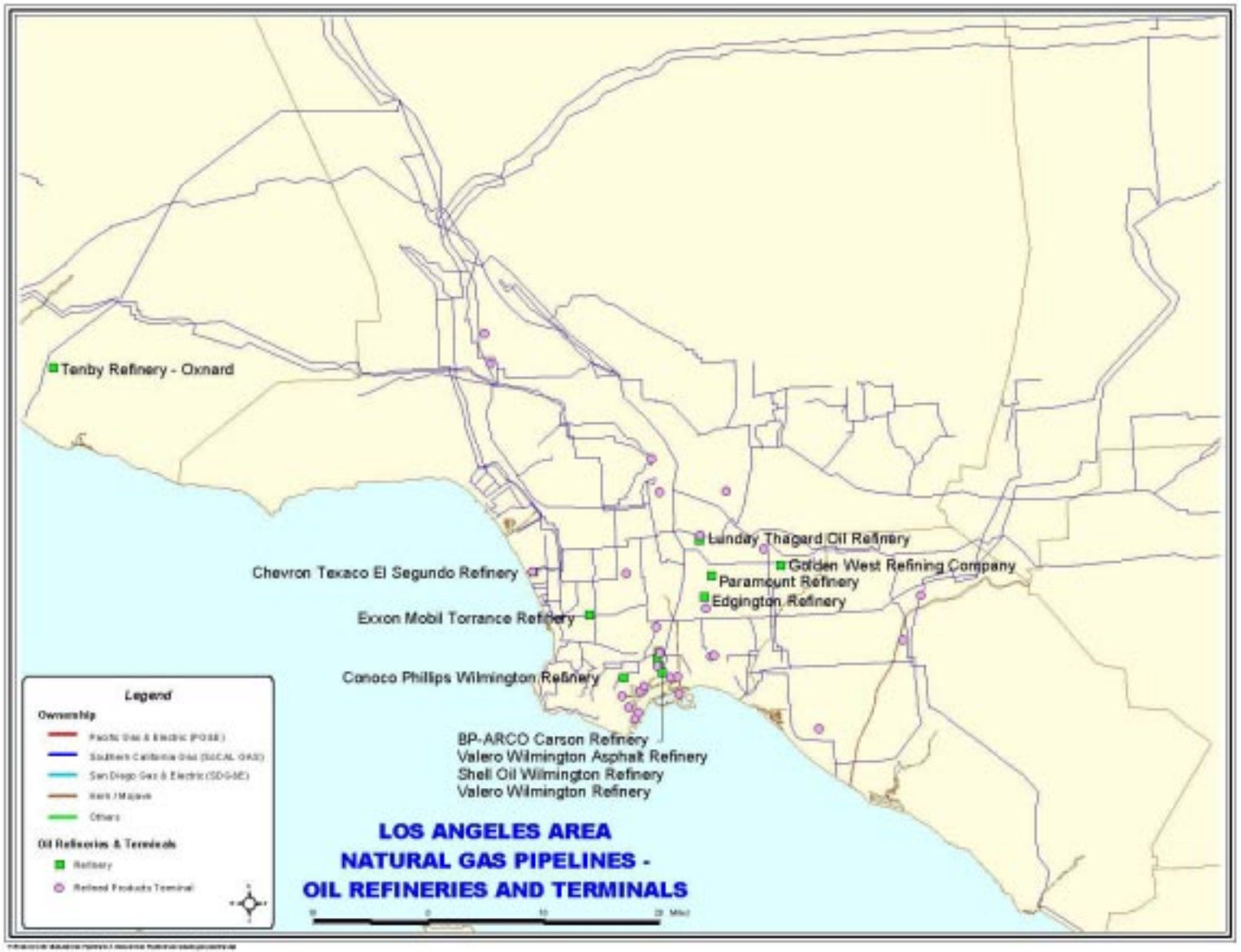
Tenby Refinery - Oxnard
Chevron Texaco El Segundo Refinery
Exxon Mobil Torrance Refinery
Conoco Phillips Wilmington Refinery
Lunday Thagard Oil Refinery
Golden West Refining Company
Paramount Refinery
Edgington Refinery
BP-ARCO Carson Refinery
Valero Wilmington Asphalt Refinery
Shell Oil Wilmington Refinery
Valero Wilmington Refinery
Legend
Ownership
Oil Refineries & Terminals
Refinery
LOS ANGELES AREA
NATURAL GAS PIPELINES -
OIL REFINERIES AND TERMINALS

Key Questions to be Addressed In the PIEPR Include:

- What are the characteristics of California's petroleum infrastructure from 1985 to 2003?
- What are the historical trends of environmental, and public health and safety attributes of petroleum infrastructure?

Key Questions Continued

- What are the environmental, public health and safety trends associated with:
  - importing increased quantities of petroleum and refined products through existing or expanded marine terminals;
  - transporting increased quantities of petroleum and refined products through existing and expanded pipelines or other delivery systems like rail and tanker trucks;
  - storing increased quantities of petroleum and refined products; and
  - expanding refining capacity to increase efficiency and throughput?

Key Questions Continued

- What challenges do environmental trends present to future development of petroleum infrastructure?
- What information do local, regional, and state agencies need to address future environmental trends from petroleum infrastructure development?
- What policy recommendations should be made to ensure that environmental, public health and safety trends are addressed?

Data Will Be Aggregated

- Northern California
- Southern California
- Central Coast
- San Joaquin Valley

Environmental Areas to be Addressed

- Air Quality, including Global Climate Change
- Biological Resources
- Environmental Justice
- Land Use
- Public Health and Toxic Pollutants
- Safety and Hazardous Materials Management
- Waste Management and Toxics Site Cleanup
- Water Quality and Supply

Air Quality

Staff will assess the contribution of petroleum facilities to air basin emissions of criteria pollutants in 1990 and 2003. These include:

- Sulfur Dioxides (SO2)
- Nitrogen Dioxides (NO2)
- Ozone precursors: Sulfur Oxides (SOx), Nitrogen Oxides (NOx), Reactive Organic Gases (ROGs), and Volatile Organic Gases (VOCs)
- Particulate Matter less than 2.5 microns (PM2.5)
- Particulate Matter less than 10 microns (PM10)
- Carbon Monoxide (CO)
- Sulfates
- Hydrogen (H2S)
- Vinyl chloride
- Ammonia

Biological Resources

- Refineries
  - Assess affects on habitats and sensitive species from ongoing operation.
- Crude and Product Pipelines
  - Assess affects on biological resources from construction and from accidental spills
- Marine Terminals
  - Assess affects of increased imports on biological resources from dredging operations and accidental spills.
- Clean Up Options For Oil Spills
  - Assess residual contamination levels after clean up and the potential long-term affects on biological resources.

Environmental Justice

- Present demographic data from the 1980, 1990 and 2000 Censuses.
- Identify environmental and public policy issues of concern to populations living near refineries and fuel storage terminals.
- Identify community benefits from outreach efforts and community advisory groups.

Land Use

- Land use conflicts and exposure to accidents and environmental pollutants will occur more often as competing land uses encroach upon existing petroleum infrastructure.
- Energy Commission staff plans to work with local governments and the petroleum industry:
  - to identify existing and future land use conflicts; and
  - to identify prospects for future expansion proposals.

Public Health and Toxic Pollutants

- Staff will report toxic emissions for the list of chemicals identified in Assembly Bill 2588 “Air Toxic Hot Spots Act” based on:
  - tons per year
  - tons of noncriteria pollutants per barrel of crude throughput
  - tons of noncriteria pollutants per barrel of refined product

Safety and Hazardous Materials Management

- Staff will not provide analysis of specific petroleum refineries, but will describe industry trends.
- The analysis will examine worker injuries and public exposures to accidental releases.
- Staff will identify the existing databases regarding accidents associated with petroleum infrastructure and determine their usefulness in characterizing public risks associated with California's petroleum infrastructure.

Waste Management and Toxic Site Cleanup

- Staff will provide a trends analysis of hazardous waste production from petroleum infrastructure facilities.
- The primary focus will be on refineries because these are the largest potential source of hazardous wastes.
- Staff intends to use a base year of 1985, and compare that to production of wastes in more recent years (e.g. 2003).
- Staff will not provide analyses of specific petroleum refineries, but will describe industry trends. Staff will report wastes for:
  - DTSC category A wastes – tons per year per SB14 reporting cycle
  - DTSC category B wastes– tons per year per SB14 reporting cycle

Water Quality and Supply

- Staff will address water supply and quality issues associated with refineries, marine and storage terminals, including:
  - Water Consumption
  - Waste Water Disposal
  - Storm Water Contamination

Public, Agency and Industry Participation

- Staff encourages any interested parties to comment on the proposed scope of work for the Petroleum Infrastructure Environmental Performance Report.
- Staff will need the cooperation of public interest groups, local, regional and state agencies, and industry to provide data, analysis and study results.

Questions

- We request that each party participating in the workshop address the following questions:

1. What do you believe is the most important issue staff should address in the PIEPR?
2. What additional areas do you believe the staff should address in its petroleum infrastructure environmental trends analyses?
3. What data do you have that could assist staff in conducting its analyses?
4. What analyses can you provide that would supplement or improve staff's proposed scope of work?
5. What information do local, regional or state agencies need from the Energy Commission to help plan for continued or expanded operation of petroleum infrastructure facilities?
6. Other comments or suggestions?

Contact Information

- Project Manager Richard K. Buell
  - Phone 916 653-1614
  - Email **rbuell@energy.state.ca.us**
  - Energy Commission website [**http://www.energy.ca.gov/energypolicy/index.html**].
- Written comments should be submitted by 5:00 pm on **December 30, 2004**.
- Please include docket number 04-IEP-01A and indicate "*2005 Energy Report - Transportation Energy Reports*"